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Data Collection OIR Participants

Enclosed are the Comments of the California Energy Commission Staff regarding the Ad Hoc Information Committee Report entitled "Proposal on Consumer Data Reporting Requirements: Consumption, Consumer Characteristics and Load Research," dated September 17, 1999. Staff's understanding is that parties have been directed to file Comments by October 6 in order to permit reply comments to be provided in written or oral form at the Committee Hearing scheduled for October 13.

Questions regarding these Comments may be directed to Michael Jaske at (916) 654-4777 or Richard Rohrer at (916) 654-4899.

Cordially,

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Staff Comments
On
AdHoc Information Committee Consumer Data Report

"Proposal on Consumer Data Reporting Requirements: Consumption, Consumer Characteristics and Load Research"
Dated September 17, 1999
Docket No. 97-DC&CR-1

October 6, 1999

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Executive Summary

These Comments provide California Energy Commission (Energy Commission) Staff responses to the Ad Hoc Information Committee's Proposal on Consumer Data Reporting Requirements: Consumption, Consumer Characteristics and Load Research Data (Committee Report) published on September 17, 1999.

In general, Staff supports the Committee's approach and believes that the Committee's proposed reporting requirements implement the Committee's June 12, 1998 principles while satisfying Energy Commission data needs. Staff notes that the California Measurement Advisory Council (CALMAC) agreement extensively referenced in the Committee Report is critically important, and there is a need to refine its interpretation through time. Since commitments using the Energy Efficiency Public Goods Charge (EEPGC) funds can only be made through year 2001, the Commission may have to revisit these issues in deliberations about post-2001 EEPGC programs. Finally, Staff wishes to remind the Committee of its need for additional resources to accept the responsibilities that the Committee Report proposes to shift from utility distribution companies (UDC).

Staff's Comments outline a wide range of specific topics, which if addressed in a revised Report, would make the Committee's proposals more effective:

a. the Report needs to clarify how the EEPGC funds are "controlled" by California Board for Energy Efficiency (CBEE), by the California Public Utilities Commission (CPUC), and some new entity in post-2001;

b. clarification is required for the extent to which EEPGC funding of "some" load research can occur as a result of the CALMAC agreement;

c. clarifications are required about how a municipal utility might opt into the CALMAC process;

d. recognition of needs that UDCs and local distribution companies (LDC) have for standard industrial classification (SIC) coding justify their development for use by UDCs, LDCs, energy service providers (ESP), and Core Transport Agents (CTA);

e. Staff confirms its need for estimated commodity prices in lieu of revenue data, but there are issues of the confidentiality of the data because portions may already be released by CPUC through its consumer price disclosure activities;

f. special natural gas issues resulting in shifts from distribution utility reporting to retailer reporting will require new data exchange mechanisms, e.g. need for a modified natural gas direct access service request (DASR), as well as education of gas marketers;

g. implementation of the Committee proposals requires transfer of SIC data from UDCs to ESPs on one time and continuing basis, but this is similar to previous UDC/ESP data exchange protocols;

h. load research requirements should be tied to the entity performing the distribution function, which is not necessarily the current UDC, although they are one and the same now;

i. hourly load research reporting requirements requires development of new accuracy standards;

j. the extent of UDC cooperation with the Energy Commission in support of Energy Commission-conducted surveys should be clarified; and

k. revisions to the proposed survey data disclosure practices are needed.

1. INTRODUCTION AND SUMMARY

This report provides comments of the California Energy Commission Staff on the draft report (Report) on consumer data reporting requirements issued by the Ad Hoc Information Committee (Committee) on September 17, 1999. These comments are organized into two broad sections. First, general comments that are applicable to the broad approach that the Committee has chosen in shifting the burden of data collection and reporting from UDCs toward retailers and the Energy Commission Staff. Second, specific comments on a number of topics about which the Committee should be aware. These specific comments provide clarification of specific issues and proposed solutions that the Committee should include in the final version of its report, and sometimes uphold key elements of the Committee proposal by broadening the existing record and the justification that AHIC has used in the draft report. Staff requests that the Committee adjust its final report to reflect these comments.

AHIC has developed a report recommending revised consumer data collection and reporting requirements that seems to balance the interests of the entities asked to provide data about electricity and natural gas industry activity with the needs of the Energy Commission for such data to implement its industry monitoring, policy analysis, and information dissemination responsibilities.

Staff believes AHIC's specific data reporting requirements recommendations are consistent with the principles that were adopted by the Commission in June 1998 from AHIC's initial policy recommendation report. Clearly AHIC has utilized the principle of equivalent data requirements for entities performing equivalent functions in the industry by requiring that electricity commodity ESPs provide data about retail customer usage in parallel with UDCs performing an analogous function for the bundled service customers. AHIC has also used the principle to continue a load research requirement on the UDCs alone because they continue to have ratemaking responsibilities for all loads on their distribution systems that ESPs do not share. AHIC has also used the principle of reducing burden on industry participants to the lowest level feasible with Energy Commission data requirements by endorsing a major shift in responsibility for customer characteristics research to Energy Commission Staff and away from UDCs which no longer retain an obligation to serve.

Staff endorses the approach embodied in the Committee Report, but suggests that various clarifications are required to ensure that what the Committee intends actually takes place in the real world. Staff seeks assurance that resources required for Energy Commission-conducted survey processes are actually available, and suggests language changes to ensure that utility support needed for Energy Commission-conducted surveys will actually be provided by utilities.

2. GENERAL COMMENTS

This section provides a brief set of general comments about the overall compromise embodied in the Report.

2A. Energy Commission Authority to Require Retailers to Provide Data

Page 7 of the Committee's Report briefly recounts the issue of the Commission's authority over energy service providers (ESP), which had been contested in the early phases of this OIR, but which the Commission answered to its satisfaction in the Committee's June 12, 1998 report. In the meantime it has become more clear that ESPs are subject to the jurisdiction of the Board of Equalization and the federal Energy Information Administration for reporting data much like what the Committee's Report proposes. ESPs are, in fact, providing data to the California Board of Equalization (BOE) and the federal Energy Information Administration, so there is little justification for continued assertions that the Commission should not also obtain electricity consumption data.

2B. Staff Support for AHIC Balancing of Conflicting Interests

Staff believes that the proposed reporting requirements included in the AHIC report provides a reasonable balancing of the obligations placed on the entities in the industry and the Energy Commission's needs for, and capabilities to independently collect, data for its monitoring and policy assessment functions. It is clear that UDCs will have smaller data requirements than in the past, that ESPs and gas marketers will have more, and that the Energy Commission itself will have more. Events of the past year have revealed the benefits to the Commission of independent data about retail electricity sales to monitor the proper submission of ERPA surcharge funds to the BOE. Staff believes that the proposed reporting requirements are a reasonable set of changes from the current regulations, and that the Committee's recommendations properly reflect the responsibilities of various categories of entities in the restructured industry.

The Committee Report rejects options put forward by Staff that involve wholesale transfers of customer usage or load research databases to the Energy Commission. In the case of customer usage data, the Committee Report proposes to continue the traditional approach by requiring retailers to extract, summarize, and submit aggregates of usage data. In the case of surveys, while the Energy Commission would be able to conduct some customer surveys using the funding provided through the California Measurement Advisory Council (CALMAC) Agreement, the participating utilities must continue to provide supporting services. For example, they must provide copies of their customer energy usage accounting systems to permit the Energy Commission to select the sample that will receive a survey questionnaire. Overall, the Committee Report shifts Staff, retailers and utilities further in the direction of a collaborative process. Staff believes that some additional clarification is needed to ensure that the parties to this collaboration understand their obligations, responsibilities, and opportunities.

2C. Critical Importance of CALMAC Agreement

The Report appears to rely upon implementation of the CALMAC Agreement filed by six entities in the California Public Utilities Commission (CPUC) Annual Earnings Assessment Proceeding (AEAP) in August 1999. While the Agreement is short on many implementation details, it generally creates a framework in which some EEPGC funds and other funds collected from natural gas ratepayers would be made available for the consumer characteristics data collection projects. The Agreement creates a minimum funding level for the Energy Commission Staff through 2001 to conduct certain basic survey research projects, with the opportunity for some portion of a larger pool of measurement, assessment and evaluation (MA&E) funds to be directed to additional survey research projects.[1] Compared to historic levels of funding for survey and load research, the amounts available are quite small. However, they do represent the first firm, multiyear commitment for this purpose since DSM funding was removed from UDC rates. As such, the Agreement is of critical importance to the compromise reflected in the AHIC proposal.

Staff notes that the CPUC has still to approve the CALMAC Agreement. In fact, there is active opposition to it from some organizations. The Energy Commission, parties interested in reducing data collection obligations on UDCs, and private entities that might benefit from data resulting from projects with some cost recovery opportunities of the CALMAC Agreement should be motivated to support the CALMAC Agreement at the CPUC. The Energy Commission should make its support for the Agreement known at each opportunity in CPUC proceedings.

2D. Need for Additional Resources to Implement AHIC Decisions

Staff also notes that the recommendations contained in the Report place considerable staffing burdens on the Energy Commission itself, even when funds for some projects are obtained from the EEPGC funds. Additional Energy Commission budget resources or redirection within existing Energy Commission budget resources, will be essential to the effective implementation of the Report's recommendations. Two examples illustrate, but do not exhaust, these incremental staffing burdens. First, retailer based electricity and natural gas consumption reporting means having to receive and process data directly from about 100 entities rather than 50 utilities as ESPs, gas marketers, and core transport agents provide data directly to the Energy Commission. Second, design, management, and processing of consumer survey data projects will be undertaken by Energy Commission staff rather than UDCs. Energy Commission management has been made aware of these needs and is now pursuing several options.

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[1] The CALMAC Agreement also authorizes utility cost reimbursement for several other activities that are necessary to implement Energy Commission data collection regulations.

3. SPECIFIC COMMENTS AND SUGGESTED CHANGES

In this section Staff identifies several specific topics within the Committee Report that should be revised to reflect the situation in the restructured industry or to slightly revise the actual recommendations. In no case does Staff propose a major change to the balance of conflicting interests developed by AHIC.

3A. Control Over EEPGC by CBEE

Page 18 of the Report reads that AB 1890 transferred control over the Energy Efficiency Public Goods Charge (EEPGC) to the California Board for Energy Efficiency (CBEE). Because of the proposed nature of the CALMAC Agreement and CBEE's unwillingness to endorse it, it is important that the Report reflect the facts.

The California Public Utilities Commission (CPUC) is charged by AB 1890 with administration of the EEPGC. AB 1890 does not refer specifically to CBEE. CBEE is an advisory body created solely by the CPUC to have input from a body of representative technical professionals.

Importantly, CBEE does not exercise direct control over EEPGC expenditures. CBEE makes recommendations to the CPUC about budgets for expenditures from the EEPGC, but the CPUC makes the decisions and announces them via formal decisions. While the CPUC frequently accepts CBEE recommendations, it also departs from them from time to time. In particular in the subject area of measurement, analysis, and evaluation (MA&E), the CPUC has departed from CBEE recommendations numerous times. For these funds, the CPUC's Energy Division receives periodic proposals from CBEE and determines what projects to authorize. As a pertinent example to the Committee report, the CPUC awarded funds to the Energy Commission for implementation of a commercial sector survey from both 1999 and year 2000 budgets despite CBEE's opposition to year 2000 funding.

CBEE has not been willing to endorse long term agreements to provide EEPGC funds to the Energy Commission or another other organization to enable replacement of permanent obligations for utilities to conduct consumer characteristics surveys.[2] CBEE has only endorsed single, project-specific funding of such surveys, and apparently wants to determine how well the Energy Commission can perform before it awards additional funding. Short term, project by project funding does not provide the assurance that the Energy

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[2] When the options for continuing energy efficiency activities after restructuring were developed, and when the EEPGC charge was created in AB 1890, the fact that utility demand-side management budgets contained various non-DSM activities was overlooked. Unfortunately, these activities involved utility compliance with Energy Commission's Quarterly Fuel and Energy Reports, Common Forecasting methodology requirements, and Utility Data Plan requirements. The Energy Commission has struggled to obtain CPUC (and CBEE) recognition of this oversight and an agreement to permit EEPGC funds to cover such activities.

Commission needs in order to reduce or eliminate utility obligations to collect and report consumer characteristics data. Therefore, the CALMAC Agreement is a breakthrough that enables AHIC to reduce utility obligations during 1999 - 2001. It is important that this Agreement be accepted by the CPUC to enable the Committee's proposal during this period, but a renewed effort to secure funding for Energy Commission data needs will be required for the post 2001 period as the EEPGC is renewed by the legislature.

Since the CALMAC Agreement forms the funding arrangements for the customer characteristics data collection and reporting requirements portions of the AHIC report, and CBEE is apparently unwilling to accept the Agreement, it is important that AHIC appreciate the nuances of the relationships among EEPGC, the CPUC, and its advisory body. Staff recommends that page 18 of the AHIC report be revised to more accurately cite these relationships.

3B. Funding of Utility Load Research Activity using the EEPGC

Pages 29 - 30 of the Report contain the recommendation that utilities be obligated to provide system and economic sector load shape data to the Energy Commission. For medium sized utilities the system-level reporting requirement is new, but the costs of compliance are negligible since utilities already have this data for their own operational purposes and report it annually to FERC using Form 714. For large utilities the AHIC recommendations shift from 12 sets of typical day hourly load profiles to full 8760 hours per year for each customer sector. Again the costs of compliance with the expansion from typical days to full hourly are negligible since 8760 data are needed in order to develop typical days for each month. However, there may be some incremental costs of compliance with the customer sector reporting requirement in current regulations since most utilities have developed load research samples for tariff-based rate groups, not economic sectors.

Based on discussions with utilities over the past decade that this requirement has been in place, there are two sources of incremental costs of compliance with Energy Commission load research (LR) requirements over those needed for rate design. First, the need to increase sample sizes to ensure that sufficient sample points exist to allow the data to simultaneously represent both tariff-based rate groups and economic sectors.[3] Second, the need to develop two sets of weighting factors and to process the data twice – once using tariff-based rate group weights for ratemaking purposes and once using economic sector-based weights for reporting to the Energy Commission.

The Committee report proposes, following the CALMAC Agreement, that these incremental costs for the UDCs be eligible for EEPGC cost reimbursement. Staff believes that this is a reasonable recommendation because economic sector-based analysis should be the basis for energy efficiency market targets and program

[3] Energy Commission load research requirements specify a fixed set of economic sectors and a level of accuracy consistent with federal PURPA standards.

designs as it is for longer term load forecasts. Rate group-based load data will soon be irrelevant to energy efficiency programs because electricity costs will be dominated by PX hourly price patterns, not the fixed, annualized values frozen into tariffs by AB 1890. As customers become exposed to these much more irregular and volatile commodity energy prices, knowledge of load patterns for more homogenous groups of customers will be needed to determine how customers respond and to evaluate the cost-effectiveness of energy efficiency measures. Rate group-based load patterns will be increasingly less relevant for energy analysis purposes. Thus, the costs of EEPGC funding for these incremental costs is matched by the benefits to those conducting energy efficiency and consumer response analyses.

Staff will work on the implementation of the CALMAC Agreement to ensure that only the true incremental costs of UDC compliance with Energy Commission load research requirements are reimbursed with EEPGC funds.

3C. Municipal Utility Requirements and Inclusion within CALMAC Process

On page 28 of the Report, the Committee asserts that its combination of fixed survey requirements and the compliance option of joining the CALMAC collaborative process will encourage municipal utilities to join the collaborative process sketched in the CALMAC Agreement. Staff believes that these proposed requirements would have this effect, but that several details remain to be worked out.

First, a municipal utility joining CALMAC would need to make a financial commitment extending over several years. Most survey projects take more than one year from vendor selection to data delivery, so more than one budget year's funds will be required. Second, the collaborative process is likely to result in surveys and supplemental projects that, taken as a package over several years, are less expensive than the fixed requirements now existing in Energy Commission regulations. To achieve these benefits will require the municipal utility to make a commitment extending over several years, thus making several contributions to CALMAC and foregoing several year's worth of direct expenditures on its own surveys.

Second, the process of developing and fielding "statewide" surveys requires all parties to enter into compromises about the scope, questionnaire design, and sampling scheme that once were virtually under their unilateral control. How the CALMAC process will elaborate upon brief descriptions contained in the Agreement is unknown, but this is crucial to new entities coming into CALMAC.

Third, the Agreement provides some funds directly to the Energy Commission, permitting projects that will be under its sole control, while allowing additional projects to be identified and funded as a result of the collaborative discussions among the CALMAC participants. Thus, it appears there are two kinds of projects that municipal utilities must evaluate, ones in which the Energy

Commission staff exercise considerable control, and others for which the CALMAC parties as a group define the nature of the project.

Finally, for both kinds of projects, a municipal utility must provide access to its customer usage accounting system and load research data sample to enable a properly stratified, random sample to be drawn. One of the benefits of uniform surveys conducted on a statewide basis is the reduced overhead costs of sample design and selection, questionnaire development, etc. compared to many projects conducted in parallel. However, the price for this cost reduction is providing access to sensitive consumer usage and load research data in a timely manner. Again, implementation discussions about the CALMAC process will have to develop practicable mechanisms to ensure this timely access while preserving confidentiality of individual customer records.

3D. Benefits of SIC Centralized Coding and Transfer to Retailers

Pages 25-26 of the Report contain the recommendation that UDCs continue to classify all end-use accounts by SIC code, including those customers that participate in direct access.

Staff agrees with the Committee that SIC coding is best classified as a distribution-related function, not a retail function, at this time. Utilities have SIC-based tariffs, such as PG&E's E-36 rate schedule, which apply to the regulated, distribution-related prices and are separate from the market-based consumer prices and the retail function of UDCs and ESPs. Clearly utilities have tariffs for which SIC codes are essential, while retailers do not.

Staff supports the recommendation as a method to ensure coding consistency. Ideally, one entity should code all of the customers in the state. For example, the Economic Development Department (EDD) classifies most employers reporting labor force statistics through EDD to the federal government. Ideally, EDD could be a source of common classification used by many entities desiring economic classification. To accomplish this would require synchronization of many independent end-user databases through name and address matching. A pilot project to test the feasibility of this approach has not yet demonstrated that SIC-codes can be used by all entities requiring economic classifications of end-users. Absent a single source, the next best solution is to have the fewest number of entities responsible for SIC coding. Limiting SIC coding to UDCs, and not including ESPs, limits the number of SIC coders and increases SIC-coding consistency and accuracy.

Continuing an obligation for utilities to code all end-use customers will make the forthcoming conversion from SIC to North American Industrial Classification System (NAICS) much easier to implement since there will be fewer entities that have to invest in the overhead to train their personnel to understand the coding conversions. Finally, Staff would like the Committee to clarify that the phrase UDC on pages 25 and 26 refers to both investor-owned utilities and to municipally owned utilities.

3E. Need for Estimates of Commodity Energy Prices

On pages 20 – 21, the Committee Report proposes a new reporting requirement for retail end-user commodity energy prices in lieu of revenue reporting. The Committee describes its balancing of the concerns of retailers versus the needs of Energy Commission Staff for energy price data. The Committee proposes to abandon revenue reporting and to substitute in its place a "standalone" estimate of commodity energy prices reported directly by retailers. Implicit in the Committee's proposal is the necessity for Staff to obtain distribution rates and other charges from some public source and use them along with the commodity energy price submissions to reconstruct overall energy prices.

As part of its market monitoring and customer demand / price responsiveness roles the Commission needs data concerning the average electric price paid by customers. In addition, these provide the foundation for price projections to use in developing demand forecasts.

Staff supports the elimination of revenue reporting by retailers, but expresses concern that additional staff resources will be required to "reconstruct" prices that could once be obtained directly from utility-reported total revenues (commodity energy, distribution, transmission, etc.). Further, the reporting requirements will have to be enforced on ESPs if they do not comply with new reporting requirements. If retailers do not provide the commodity energy price estimates required by the Committee, Staff will be left with no credible source for these values except crude market averages at the wholesale level, e.g. the PX price.

3F. Special Issues for Natural Gas Marketers

The Committee's recommendations raise two issues related to gas marketers. One is the mechanics of notification and education of gas marketers reporting gas sales to the Energy Commission even though the gas flows through the utility distribution pipeline. This is different than has been the case for natural gas marketers since natural gas markets were partially deregulated in the 1980s. Making this change is a direct consequence of the policy principles adopted by the Committee in its June 12, 1998 report.

Second, the important implementation issue of SIC code transfer from utility to marketer may have to be addressed by a technical working group as the regulations and data forms are developed. The proposal that SIC codes be sent to ESPs on an on-going basis through the DASR cannot be expected to work on the gas side in the same way as it does for electricity, because the gas DASR as a means of exchanging gas customer data has not been implemented as rigorously as it has for electricity. In the implementation phase of the OIR, the Committee will have to ensure that a mechanism for SIC codes to be supplied to gas ESPs is developed.

3G. Transfers of SIC Data from UDCs to ESPs

CPUC D.98-11-044 requires utilities and ESPs to implement the service delivery point identifier (SDPI) concept for direct access customers. SDPI implementation was recently initiated with the adoption of new EDI data exchange practices between UDCs and ESPs. The implementation mechanism for SDPI is very similar to that required for the transfer of SIC data from UDCs to ESPs.

The SDPI is the service delivery point identifier, which is a unique number for each and every point that the distribution system converts to an end-user connection. SDPI is superior to a customer account or meter number for identifying the terminus of the distribution system because it is permanent, e.g. it does not change with changes in customer occupying a premise, change in account number due to meter routing changes, change in the physical meter measuring usage, etc. Generally a service delivery point coincides with a meter, but there are some unmetered loads where this occurs as well, e.g. street lights.

The SDPI will be supplementing and eventually replacing the account number in the communications between UDCs and ESPs. It was developed externally to the UDC customer accounting systems. At present it is implemented just for direct access customers, but eventually will be implemented for all service delivery points, whether bundled service or DA.

Both ESPs and UDCs have had to modify their systems to allow for this new value. The UDC will generate the value and pass it through to the ESP. For new customers as of a certain point in time, the SDPI is part of the updated DASR. For the 150,000 DA accounts that have already had an old DASR processed, the UDC needs to send a one time file that has the SDPI and the customer account for each DA customer, and the ESP then loads this data into its system and uses the SDPI in future data exchanges with the UDC.

Does this concept sound familiar? Yes, it is virtually identical to what will have to happen with ESPs accepting SIC information from the UDC, including both ongoing transfers for new DA customers, as well as "one time only" transfers of existing customers to populate the ESP accounting systems. The Committee should direct parties to form a technical advisory group for implementation of SIC code transfers, including one-time-only startup activities, but the SDPI process should provide a good model for expeditious implementation of SIC code transfer mechanisms.

3H. Load Research Requirements of Distribution Utilities

Page 29 of the Report links the performance of load research to the distribution function of the utility. Clearly the utility has traditionally been the entity that collects load research data for use in ratemaking and planning. There are no specific proceedings under way at the CPUC in which this would change, even though there are possible distribution tariffs than do not rely upon volumetric

rate designs, and hence would not require usage data from end-users. If a major change in rate design were to take place, then the Energy Commission should consider revising load research obligations upon such a utility.

Page 30 of the Report suggests that UDCs may need the cooperation of ESPs to ensure that load research samples remain representative of all end-users connected to the distribution grid. Staff supports this point. Staff understands that as large customers shift to direct access, exchange previous metering with the interval metering equipment required for direct access, in many cases load research meters have been removed. We also understand that there have been discussions, and perhaps even agreements already in place, for the UDC to install parallel load research meters or to gain access to the interval metering data from the ESP when this is necessary to ensure that load research samples are representative for each tariff-based rate group.

Staff emphasizes the need for distribution utilities to preserve representative load research samples for both tariff-based rate groups as well as economic sector-based groups.[4] We believe that the final regulations adopted for load research should place some affirmative obligation on ESPs to cooperate with utilities to ensure this result. Of course, there are cost and data confidentiality hurdles that may have to be overcome, but these appear to be small matters in contrast to the essential goal of maintaining highly accurate, statistically significant load research data.

The Committee should also consider whether the possibility of non-interconnected islanding using distributed generation (DG) technologies might be an instance in which ESPs providing such service must conduct load research and provide this data to the Commission. Under this circumstance, the ESP is effectively operating as a distribution utility as well as an energy commodity provider; therefore it should be prepared to accept distribution utility obligations. We are unsure whether the probability of islanding is sufficiently high that it should be addressed in this round of regulatory changes, or whether the Committee's report alone might provide a signal that this dimension of load research may have to be revisited in the future. The DG industry might benefit from an explicit discussion of this concern in the final Report.

3I. Load Research Accuracy Requirements

On pages 29 – 30 the Report stresses the need for accuracy of the load research data to be provided to the Energy Commission, but focuses on extension of the current requirements for utilities. Nowhere does the Report define the accuracy standards that are to be achieved, and whether these might change for an era

[4] Current Energy Commission load research regulations have a specific accuracy standard.

when hourly loads rather than peak demand estimates are the focus of the load research data.[5]

During the CPUC proceedings that established load profiles as a mechanism for use in lieu of interval metering for direct access, the issue of the technical standard for 8760 hour-based load profiles rather than peak demand estimates was raised, but never resolved. This was one of several load profile topics that was to have been pursued during 1998, but has in fact not yet been addressed within CPUC proceedings.

The Committee may need to obtain further comments from parties to this proceeding about how hourly load profile accuracy should be defined. Criteria that measure accuracy across many or even several hours of the year rather than the simplistic peak demand criteria that FERC established in its PURPA requirements are desirable. This input would not result in extension of load research requirements for any other entity, but could conceivable impact the size of the load research samples themselves, and therefore the costs to the distribution utility of conducting load research programs.

3J. UDC Cooperation in Support of Energy Commission-Conducted Surveys

On page 28, the Report makes a key statement that Staff believes should be amplified in the final report.

> "The regulations would provide that utilities must submit to the Energy Commission or an Energy Commission designated contractor the necessary information and data for conducting surveys and performing subsequent analyses. This will include appropriate billing file records to enable sampling, individual billing histories for sampled accounts, and load metering data as necessary."

Staff supports this requirement, and proposes below additional language to ensure that the general sentiment is matched by actual utility conduct in future projects. There are several reasons that Staff believes such strengthening is required.

First, during discussions about utility voluntary support for the CBEE-sanctioned commercial building sector survey now in development, some utilities have expressed great reluctance to provide precisely these supporting data to the Energy Commission Staff. Some utility staff apparently believe they have some obligation to be the custodian of end-user consumer data and to safeguard it against mischievous behavior by Energy Commission Staff. Staff does not believe that utility custodianship for customer data [the universe of usage data and load research sample data] is somehow superior to that of an disinterested public agency, when some actions of the UDCs reveal them to be clearly acting as

[5] Current Energy Commission regulations require that load research estimates for each customer sector must be accurate to within +/- 10 percent for each sector peak for each month with 90 percent confidence.

a competitor to private energy service providers. Data collected by utilities with funds provided by ratepayers does not belong to the UDC and the UDC should provide data to public agencies under confidentiality agreements that ensure protection of end-use consumer privacy.

Second, the current survey requirements include both the survey itself that gathers end-user characteristics data and various analyses that process the survey data to produce a wide range of results. Staff continues to have the same needs for UEC, EUI, and floorspace analyses that support its demand forecasting activities. Utilities with no energy procurement responsibilities may be less interested in these analytic studies. Staff plans to develop "survey" projects that encompass both basic saturations of customer characteristics as well as the downstream analytic assessments that are needed to describe how energy is used within each sector. The data support that utilities should provide includes the end-user consumption and load research data needed for these analytic assessments.

Third, to permit adequate progress on implementation of a commercial sector survey funded in 1999 using EEPGC funds, the Energy Commission Staff "negotiated" access to UDC billing records on behalf of the contractor that the Energy Commission will choose through an RFP-process. UDCs were unwilling to provide the universe of usage records to the Energy Commission Staff for it to process for sample design and selection purposes. Staff believes this is an unwarranted intrusion into internal Energy Commission business, that UDCs should not have any rights to selectively favor Energy Commission-contractors or contractors versus the Energy Commission itself. Energy Commission management should have the discretion to determine whether the data utilities provide goes to the Energy Commission for subsequent use by a Energy Commission contractor or the Energy Commission staff.

Fourth, an explicit feature of the CALMAC Agreement is reimbursement opportunities for utility efforts to provide support to the Energy Commission for conducting general surveys. Staff acknowledges that utilities will have costs of copying portions of customer usage data files for transmission to the Energy Commission for use in selecting samples. Reimbursement of such costs, upon submission of appropriate documentation of these costs, is appropriate. Staff believes that ESPs, gas marketers, or gas CTAs may have to provide such data in the future if utilities no longer acquire consumption data records for all end-users connected to their distribution systems. This could happen if utility distribution rates, and other charges that utilities collect, do not use energy consumption as a computational variable in computing charges. While this possibility may seem remote, the Energy Commission Staff believes that private retailers may eventually become a source for consumption data that utilities do not collect, and thus would be essential players to ensure that a complete set of end-users were available for selecting a sample for consumer surveys. Should this be true, then the cost reimbursement concept using EEPGC, or other funds, should be considered for such retailers.

Fifth, a difficult element of discussions during the spring/summer of 1999 with the three UDCs was access to load research (LR) data as an element of the commercial sector survey design. UDCs were highly reluctant to provide this data, expressing concern that participation in the survey might "contaminate" the LR sample point. Staff understands the CALMAC Agreement to allow utilities to replace sample points affected by participation in a survey project, and be reimbursed by public funds. Staff would only support claims for reimbursement if a quantitative standard can be developed to measure that an end-use consumer's behavior actually change as a result of participation in a survey.

As a result of these concerns, staff believes the previous passages in the Report should be modified to read as follows (changes shown in strikethrough and underline):

> "The regulations would provide that utilities must submit to the Energy Commission or an Energy Commission designated contractor ~~the necessary~~ <u>all</u> information and data for conducting surveys and performing subsequent analyses <u>that the Energy Commission Staff believes is necessary, and in a timely manner</u>. This will include appropriate billing file records <u>for all distribution customers</u> to enable sampling, individual billing histories for sampled accounts, and load metering data ~~as necessary~~ <u>that the Energy Commission Staff believe to be required for a given project. All individual customer data should receive the confidentiality protections appropriate to ensure that individual privacy is maintained.</u>"

With these changes, Staff believes the support that utilities (and perhaps retailers when required) must provide to ensure that Energy Commission-conducted surveys can be effective will be clarified and less likely to cause disputes in the future.

3K. Survey Data Disclosure Practices

On page 29 the Report summarizes past EIA survey disclosure practices and techniques. EIA now puts out public use files for both residential and commercial surveys. A revised Report might reword the EIA practices section as follows:

> a. Residential - a public use file with individual respondent data is released with name and address (and most other geographical identifiers) removed. Some other 'masking' of usage and other data is used to ensure that even utilities cannot match respondents to their customers using their own consumption histories. This is achieved by adding error terms to weather, prices, and other variables, and using other masking techniques.

b. Commercial - a public use file with individual respondent data is released. As with the RECS, variables are removed and masking is performed to prevent the disclosure of individual respondents and their data.

c. Industrial - no results except written tabulations and analytic reports. EIA does not even get the data itself, it remains in a Bureau of Census 'data warehouse' that only authorized people with pre-approved research studies can interrogate. Monitors ensure that nothing leaves electronically and that paper printouts do not violate disclosure restrictions.

A substantial dilemma is present in disclosure of survey data. CBEE, various program administrators, and the CPUC itself are likely to be interested in the results of these surveys. Utilities that provide data for use in the sampling frame, and that provide distribution and/or commodity energy services to the end-use customer in the sample and in the population at large are likely to be interested. Which of these should get access to the data, and should this access be complete or limited?

Non-project sponsors may also be interested in the data. On the one hand, these data are used to develop the inputs for demand forecasting models, and generally Staff wishes to be able to provide the information used in its modeling activities. Excessively restrictive data disclosure rules may reduce what Staff has traditionally reported in the technical documentation for its demand forecasts. On the other hand, privacy concerns for residential and small commercial businesses, and trade secret concerns for larger businesses, argue for careful attention to disclosure of identifiable records. As noted above, federal EIA is able to provide residential and commercial survey results at the individual record level with some minor adjustments to minimize, if not fully eliminate, attempts to actually identify the end-user. Staff ought to be able to accomplish the same results as EIA using similar techniques. Industrial sector data are harder to mask because general location, size, and distinguishing characteristics about the processes used may be sufficient to identify the facility.

Staff recommends the following disclosure practices as a replacement for the Committee proposal contained on page 29:

a. CPUC (or its successor entities responsible for EEPGC-funded programs) should get access to the complete datasets of survey results, provided they sign non-disclosure agreements that preserve confidentiality. These entities do not get access to the overall billing system data or other end-use population databases used to select the samples, or the samples themselves.

b. DSM program administrators should get access to the portion of the survey data relevant to their DSM programs, providing they sign appropriate confidentiality agreements. These entities do not get access

to the overall billing system data or other end-use population databases used to select the samples, or the samples themselves.

c. Utilities opting into a project within the CALMAC process should get complete access to the portion of the results which are the customers in their service area, again providing confidentiality agreements are signed.

d. Public access should be provided at a level comparable to that provided by EIA for its national surveys, assuming that techniques for masking individual survey responses can be adapted to the smaller geographies of California to ensure that records of individual end-user respondents cannot be identified.